



SEQUENCE LISTING

<110> VLAAMS INTERUNIVERSITAIR INSTITUUT VOOR BIOTECHNOL
<120> Nucleic Acid Binding of Multi Zinc Finger Transcription Factors
<130> 2676 5174US
<140> US/10/028,396
<141> 2001-12-21
<150> 99202068.5
<151> 1999-06-25
<150> PCT/EP00/05582
<151> 2000-06-09
<160> 66
<170> PatentIn version 3.1
<210> 1
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<223> Description of Artificial Sequence: Portion of bait for screening
<400> 1
cacct 5
<210> 2
<211> 6
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<223> Description of Artificial Sequence: portion of bait for screening
<400> 2
cacctg 6
<210> 3
<211> 5
<212> DNA
<213> Artificial
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<223> Description of Artificial Sequence: portion of bait for screening
<400> 3
aggtg 5
<210> 4
<211> 7
<212> DNA
<213> Artificial
<220>

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<221> misc_feature
<223> Description of Artificial Sequence:  consensus element for binding
      of MyT1, NZF 1 and NZF 3

<400>  4
aaagttt
7

<210>  5
<211>  52
<212>  DNA
<213>  Artificial

<220>
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<223> Description of Artificial Sequence:  complex consensus sequence

<220>
<221> misc_feature
<222> (16)..(43)
<223> nucleotides 16 43 represent a spacer sequence wherein any one, more,
      or all of nucleotides 16 43 may be present or absent

<400>  5
gacaagataa gataannnnn nnnnnnnnnn nnnnnnnnnn nnnctcatct tc
52

<210>  6
<211>  30
<212>  DNA
<213>  Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence:  primer SIP1 NZF3Mut

<400>  6
ccacctgaaa gaatccctga gaattcacag
30

<210>  7
<211>  30
<212>  DNA
<213>  Artificial

<220>
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<223> Description of Artificial Sequence:  primer SIP1 CZF2Mut

<400>  7
gggtcctaca gttcatctat cagcagcaag
30

<210>  8
<211>  30
<212>  DNA
<213>  Artificial

<220>
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<223> Description of Artificial Sequence:  primer SIP1 NZF4Mut

<400>  8
caccaccta tcgagtcctc gaggctgcac
30

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<210> 9
<211> 30
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: primer SIP1 CZF3Mut

<400> 9
tcctactcgc agtccatgaa tcacaggtac 30

<210> 10
<211> 50
<212> DNA
<213> Artificial

<220>
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<223> Description of Artificial Sequence: probe Xbra WT

<400> 10
atccaggcca cctaaaatat agaatgataa agtgaccagg tgtcagttct 50

<210> 11
<211> 50
<212> DNA
<213> Artificial

<220>
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<223> Description of Artificial Sequence: probe Xbra D

<400> 11
atccaggcca cctaaaatat agaatgataa agtgaccaga tgtcagttct 50

<210> 12
<211> 23
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra E

<400> 12
taaagtgacc aggtgtcagt tct 23

<210> 13
<211> 27
<212> DNA
<213> Artificial

<220>
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<223> Description of Artificial Sequence: probe Xbra F

<400> 13
atccaggcca cctaaaatat agaatga 27

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<210> 14
 <211> 50
 <212> DNA
 <213> Artificial

 <220>
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 <223> Description of Artificial Sequence: probe Rdm + Xbra E

 <400> 14
 caatttagag tactgtgtac ttgggagtaa agtgaccagg tgtcagttct 50

 <210> 15
 <211> 53
 <212> DNA
 <213> Artificial

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 <223> Description of Artificial Sequence: probe Xbra F + AREB6

 <400> 15
 atccaggcca cctaaaatat agaatgaggc tcagacaggt gtagaattcg gcg 53

 <210> 16
 <211> 53
 <212> DNA
 <213> Artificial

 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Rdm + AREB6

 <400> 16
 caatttagag tactgtgtac ttgggagggc tcagacaggt gtagaattcg gcg 53

 <210> 17
 <211> 50
 <212> DNA
 <213> Artificial

 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra J

 <400> 17
 gcacaggcca cctaaaatat agaatgataa agtgaccagg tgtcagttct 50

 <210> 18
 <211> 50
 <212> DNA
 <213> Artificial

 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra K

 <400> 18
 atcactgccca cctaaaatat agaatgataa agtgaccagg tgtcagttct 50

 <210> 19

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<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra L

<400> 19
atccagtaaa cctaaaatat agaatgataa agtgaccagg tgtcagttct      50

<210> 20
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra M

<400> 20
atccaggccc aataaaatat agaatgataa agtgaccagg tgtcagttct      50

<210> 21
<211> 50
<212> DNA
<213> Artificial

<220>
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<223> Description of Artificial Sequence: probe Xbra N

<400> 21
atccaggcca ccgccaatat agaatgataa agtgaccagg tgtcagttct      50

<210> 22
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra O

<400> 22
atccaggcca cctaaccgat agaatgataa agtgaccagg tgtcagttct      50

<210> 23
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra P

<400> 23
atccaggcca cctaaaatcg cgaatgataa agtgaccagg tgtcagttct      50

<210> 24
<211> 50
<212> DNA
<213> Artificial

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<220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra Q
 <400> 24
 atccaggcca cctaaaatat atcctgataa agtgaccagg tgcagttct 50
 <210> 25
 <211> 50
 <212> DNA
 <213> Artificial
 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra R
 <400> 25
 atccaggcca cctaaaatat agaagtctaa agtgaccagg tgcagttct 50
 <210> 26
 <211> 50
 <212> DNA
 <213> Artificial
 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra S
 <400> 26
 atccaggcca tctaaaatat agaatgataa agtgaccagg tgcagttct 50
 <210> 27
 <211> 50
 <212> DNA
 <213> Artificial
 <220>
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 <223> Description of Artificial Sequence: probe Xbra Z
 <400> 27
 atccaggcca cctaaaatat agaatgataa agtgactagg tgcagttct 50
 <210> 28
 <211> 47
 <212> DNA
 <213> Artificial
 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra B
 <400> 28
 atccaggcca cctatataga atgataaagt gaccaggtgt cagttct 47
 <210> 29
 <211> 47
 <212> DNA

<213> Artificial
 <220>
 <221> misc_feature
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 <400> 29
 atccaggcca cctaaaatat agaatgatgt gaccaggtgt cagttct 47
 <210> 30
 <211> 40
 <212> DNA
 <213> Artificial
 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra U
 <400> 30
 atccaggcca cctaaaatat agtgaccagg tgtcagttct 40
 <210> 31
 <211> 46
 <212> DNA
 <213> Artificial
 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra EE
 <400> 31
 taaagtgacc aggtgtcagt tcttaaagtg accaggtgtc agttct 46
 <210> 32
 <211> 46
 <212> DNA
 <213> Artificial
 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra ErE
 <400> 32
 agaactgaca cctggtcact ttataaagtg accaggtgtc agttct 46
 <210> 33
 <211> 50
 <212> DNA
 <213> Artificial
 <220>
 <221> misc_feature
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 <400> 33
 atccaggcca cctaaaatat agaatattct atattttagg tggcctggat 50
 <210> 34
 <211> 50
 <212> DNA
 <213> Artificial
 <220>

<221> misc_feature
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 <400> 34
 atccaggcag gtgtaaatat agaatgataa agtgaccac ctacagttct 50
 <210> 35
 <211> 50
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Xbra W
 <400> 35
 atccaggcag gtgtaaatat agaatgataa agtgaccagg tgcagttct 50
 <210> 36
 <211> 60
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe alfa 4I WT (alfa 4 integrin)
 <400> 36
 gcagggcaca cctggattgc attagaatga gactcactac ccagttcagg tgtgttgcgt 60
 <210> 37
 <211> 60
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe alfa 4I A (alfa 4 integrin)
 <400> 37
 gcagggcaca cctggattgc attagaatga gactcactac ccagttcaga tgtgttgcgt 60
 <210> 38
 <211> 60
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe alfa4 I B (alfa 4 integrin)
 <400> 38
 gcagggcaca tctggattgc attagaatga gactcactac ccagttcagg tgtgttgcgt 60
 <210> 39
 <211> 70
 <212> DNA
 <213> Artificial

<220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Ecad WT

 <400> 39
 tggccggcag gtgaaccctc agccaatcag cggtacgggg ggcggtgctc cggggctcac 60
 ctggctgcag 70

 <210> 40
 <211> 70
 <212> DNA
 <213> Artificial

 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Ecad A

 <400> 40
 tggccggcag gtgaaccctc agccaatcag cggtacgggg ggcggtgctc cggggctcat 60
 ctggctgcag 70

 <210> 41
 <211> 70
 <212> DNA
 <213> Artificial

 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: probe Ecad B

 <400> 41
 tggccggcag atgaaccctc agccaatcag cggtacgggg ggcggtgctc cggggctcac 60
 ctggctgcag 70

 <210> 42
 <211> 21
 <212> DNA
 <213> Artificial

 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: PCR primer for E cadherin
 promoter
 sequence (341/+41)

 <400> 42
 acaaaagaac tcagccaagt g 21

 <210> 43
 <211> 18
 <212> DNA
 <213> Artificial

 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: PCR primer for E cadherin
 promoter
 sequence (341/+41)

<400> 43
 ccgcaagctc acaggtgc 18
 <210> 44
 <211> 26
 <212> DNA
 <213> Artificial
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 <221> misc_feature
 <223> Description of Artificial Sequence: forward primer E box1
 <400> 44 26
 gctgtggccg gcagatgaac cctcag
 <210> 45
 <211> 26
 <212> DNA
 <213> Artificial
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 <221> misc_feature
 <223> Description of Artificial Sequence: reverse primer E box1
 <400> 45 26
 ctgagggttc atctgccggc cacagc
 <210> 46
 <211> 24
 <212> DNA
 <213> Artificial
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 <221> misc_feature
 <223> Description of Artificial Sequence: forward primer E box3
 <400> 46 24
 gctccgggct catctggctg cagc
 <210> 47
 <211> 25
 <212> DNA
 <213> Artificial
 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: reverse primer E box3
 <400> 47 25
 gctgcagcca gatgagcccc ggagc
 <210> 48
 <211> 27
 <212> DNA
 <213> Artificial
 <220>
 <221> misc_feature
 <223> Description of Artificial Sequence: degenerated primer
 <220>
 <221> misc_feature
 <222> (25)

<223> n is a spacer and may be any nucleotide

<400> 48
cttccagcag ccctacgayc argcnca

27

<210> 49
<211> 28
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial sequence: degenerated primer

<220>
<221> misc_feature
<222> (26)
<223> n is a spacer and may be any nucleotide

<400> 49
gggtgtggga ccgga trtgc atytt nat

28

<210> 50
<211> 29
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf1

<400> 50

Gln Leu Leu Thr Cys Pro Tyr Cys Asp Arg Gly Tyr Lys Arg Leu Thr
1 5 10 15

Ser Leu Lys Glu His Ile Lys Tyr Arg His Lys Asn Glu
20 25

<210> 51
<211> 29
<212> PRT
<213> Artificial

<220>
<223> sigma-EF1nzf1

<400> 51

Gln Leu Leu Thr Cys Pro Tyr Cys Asp Arg Gly Tyr Lys Arg Phe Thr
1 5 10 15

Ser Leu Lys Glu His Ile Lys Tyr Arg His Lys Asn Glu
20 25

<210> 52
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf2

<400> 52

Glu Asn Phe Ser Cys Pro Leu Cys Ser Tyr Thr Phe Ala Tyr Arg Thr
1 5 10 15

Gln Leu Glu Arg His Met Val Thr His Lys Pro Gly
20 25

<210> 53
<211> 28
<212> PRT
<213> Artificial

<220>
<223> sigma-EF1nzf2

<400> 53

Glu Asn Phe Ser Cys Ser Leu Cys Ser Tyr Thr Phe Ala Tyr Arg Thr
1 5 10 15

Gln Leu Glu Arg His Met Thr Ser His Lys Ser Gly
20 25

<210> 54
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf3 and sigma-EF1nzf3

<400> 54

Arg Lys Phe Lys Cys Thr Glu Cys Gly Lys Ala Phe Lys Tyr Lys His
1 5 10 15

His Leu Lys Glu His Leu Arg Ile His Ser Gly Glu
20 25

<210> 55
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf4 and sigma-EF1nzf4

<400> 55

Lys Pro Tyr Glu Cys Pro Asn Cys Lys Lys Arg Phe Ser His Ser Gly
1 5 10 15

Ser Tyr Ser Ser His Ile Ser Ser Lys Lys Cys Ile
20 25

<210> 56
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1czf1

<400> 56

Gly Met Tyr Ala Cys Asp Leu Cys Asp Lys Thr Phe Gln Lys Ser Ser
1 5 10 15

Ser Leu Leu Arg His Lys Tyr Glu His Thr Gly Lys
20 25

<210> 57
<211> 28
<212> PRT
<213> Artificial

<220>
<223> sigma-EF1czf1

<400> 57

Gly Met Tyr Ala Cys Asp Leu Cys Asp Lys Ile Phe Gln Lys Ser Ser
1 5 10 15

Ser Leu Leu Arg His Lys Tyr Glu His Thr Gly Lys
20 25

<210> 58
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1czf2

<400> 58

Arg Pro His Gln Cys Gln Ile Cys Lys Lys Ala Phe Lys His Lys His
1 5 10 15

His Leu Ile Glu His Ser Arg Leu His Ser Gly Glu
20 25

<210> 59
<211> 28

<212> PRT
<213> Artificial

<220>
<223> sigma-EF1czf2

<400> 59

Arg Pro His Gln Cys Gly Ile Cys Arg Lys Ala Phe Lys His Lys His
1 5 10 15

His Leu Ile Glu His Met Arg Leu His Ser Gly Glu
20 25

<210> 60
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1czf3 and sigma-EF1czf3

<400> 60

Glu Lys Pro Tyr Cys Asp Lys Cys Gly Lys Arg Phe Ser His Ser Gly
1 5 10 15

Ser Tyr Ser Gln His Met Asn His Arg Tyr Ser Tyr
20 25

<210> 61
<211> 52
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf3+nzf4

<400> 61

Cys Thr Glu Cys Gly Lys Ala Phe Lys Tyr Lys His His Leu Lys Glu
1 5 10 15

His Leu Arg Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Pro Asn Cys
20 25 30

Lys Lys Arg Phe Ser His Ser Gly Ser Tyr Ser Ser His Ile Ser Ser
35 40 45

Lys Lys Cys Ile
50

<210> 62
<211> 54
<212> PRT
<213> Artificial

<220>
<223> SIP1czf2+czf3

<400> 62

Cys Gln Ile Cys Lys Lys Ala Phe Lys His Lys His His Leu Ile Glu
1 5 10 15

His Ser Arg Leu His Ser Gly Glu Lys Pro Tyr Gln Cys Asp Lys Cys
20 25 30

Gly Lys Arg Phe Ser His Ser Gly Ser Tyr Ser Gln His Met Asn His
35 40 45

Arg Tyr Ser Tyr Cys Lys
50

<210> 63
<211> 52
<212> PRT
<213> Artificial

<220>
<223> sigma-EF1nzf3+nzf4

<400> 63

Cys Thr Glu Cys Gly Lys Ala Phe Lys Tyr Lys His His Leu Lys Glu
1 5 10 15

His Leu Arg Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Pro Asn Cys
20 25 30

Lys Lys Arg Phe Ser His Ser Gly Ser Tyr Ser Ser His Ile Ser Ser
35 40 45

Lys Lys Cys Ile
50

<210> 64
<211> 54
<212> PRT
<213> Artificial

<220>
<223> sigma-EF1czf2+czf3

<400> 64

Cys Gly Ile Cys Lys Lys Ala Phe Lys His Lys His His Leu Ile Glu
1 5 10 15

His Met Arg Leu His Ser Gly Glu Lys Pro Tyr Gln Cys Asp Lys Cys
20 25 30

Gly Lys Arg Phe Ser His Ser Gly Ser Tyr Ser Gln His Met Asn His
35 40 45

Arg Tyr Ser Tyr Cys Lys
50

<210> 65

<211> 14

<212> DNA

<213> Artificial

<220>

<221> misc_feature

<223> Description of Artificial Sequence: a class of zinc finger

<220>

<221> misc_feature

<222> (2)...(3), (5)...(8), (10)...(13)

<223> n is a spacer and may be any nucleotide

<400> 65

cnncnnnnhnn nnnc

14

<210> 66

<211> 25

<212> DNA

<213> Artificial

<220>

<221> misc_feature

<223> Description of Artificial Sequence: a class of zinc finger

<220>

<221> misc_feature

<222> (2)...(6), (8)...(19), (21)...(24)

<223> n is a spacer and may be any nucleotide

<400> 66

cnnnnnncnnn nnnnnnnnnnh nnnnc

25